

[Faint, illegible handwritten notes or bleed-through from the reverse side of the page.]

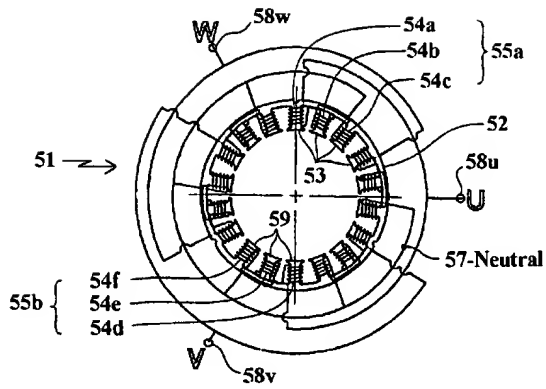


FIG. 1

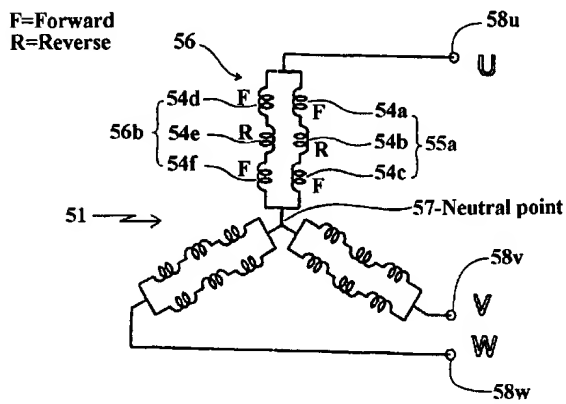


FIG. 2

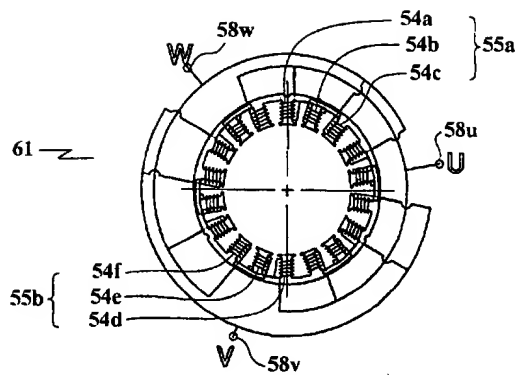


FIG. 3

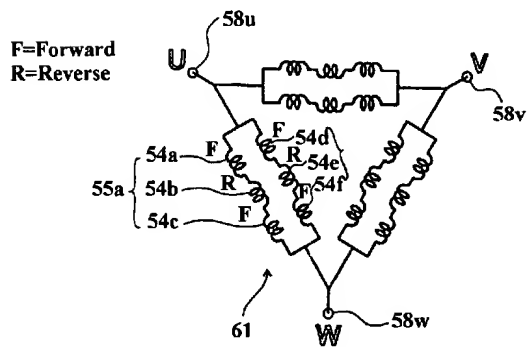


FIG. 4

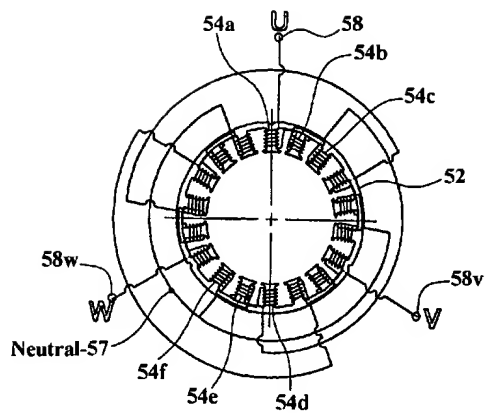


FIG. 5
(Prior Art)

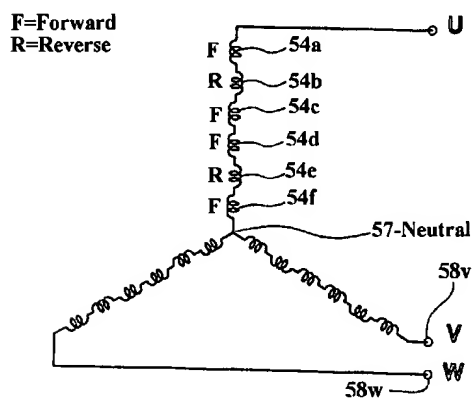


FIG. 6
(Prior Art)

FIG. 9 (Prior Art)

The figure shows a spectrum analyzer display. The top left corner shows the frequency 63.246 MHz. The top right corner shows the average signal level SP. SUM. The left side shows the power level PWR SP. A. The right side shows the length 2048 and the memory number MEM No. The bottom left corner shows the frequency 11.503 Hz. The bottom right corner shows the total harmonic distortion 46.641 mVr and 0.405%.

Line	Freq [Hz]	Mag [Vr]	THD
1	66.250	11.503	0.015%
2	133.750	1.776m	0.121%
3	200.000	13.922m	0.017%
4	266.250	1.940m	0.379%
5	332.500	43.647m	0.004%
6	400.000	454.175u	0.069%
7	466.250	725.934u	0.006%
8	532.500	874.931u	0.008%
9	598.750	181.941u	0.002%
10	666.250		

Additional readouts: X: 66.250 Hz, Y: 11.503 Vr, REC ADS 1, REC ADS 0, REC ADS 2.

FIG. 10 (Prior Art)

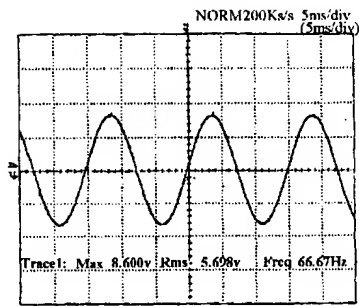


FIG. 11

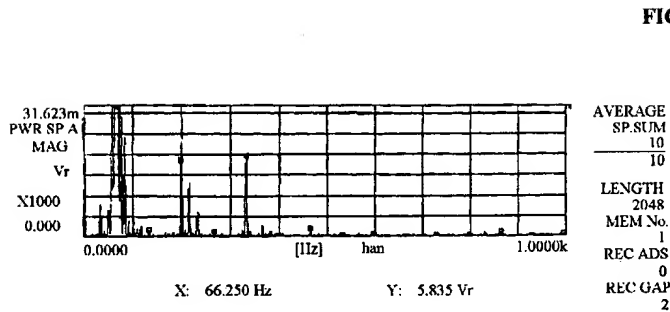


FIG. 12

[Hz]	[Vr]	
1: 66.250	5.835	
2: 132.500	1.845m	0.032%
3: 198.750	18.777m	0.322%
4: 266.250	1.133m	0.019%
5: 332.500	19.801m	-0.339%
6: 398.750	63.237u	0.001%
7: 465.000	1.866m	0.032%
8: 531.250	289.257u	0.005%
9: 597.500	429.187u	0.007%
10: 665.000	89.289u	0.002%

Total Harmonic dist.
27.461mVr
0.471%

FIG. 13

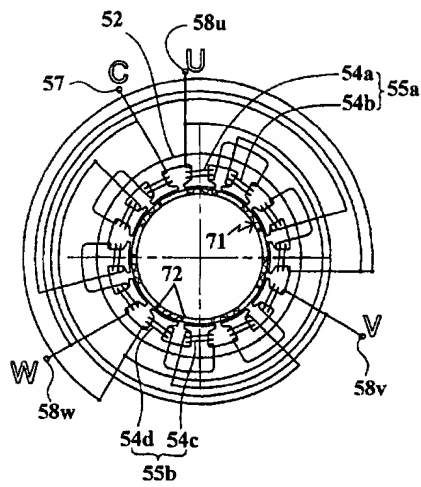


FIG. 14

F=Forward
R=Reverse

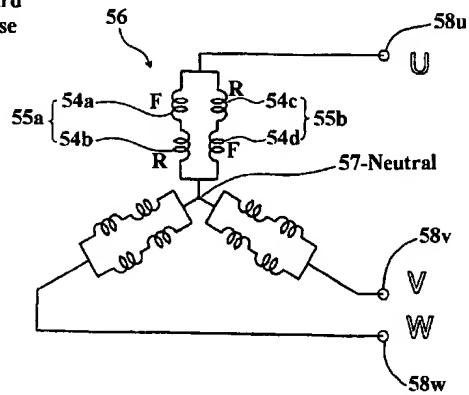


FIG. 15

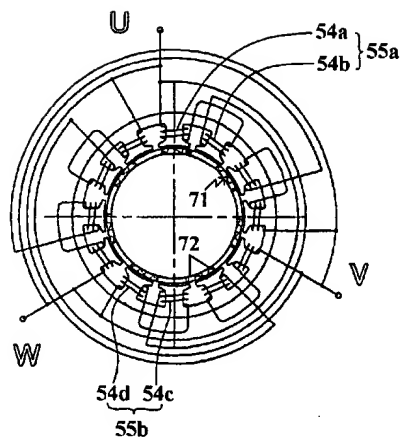


FIG. 16

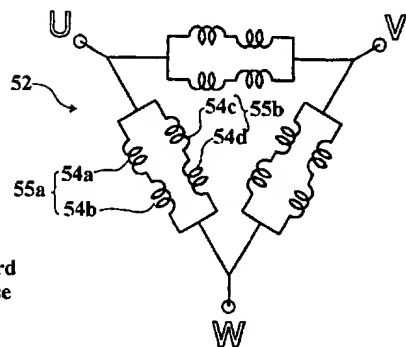


FIG. 17

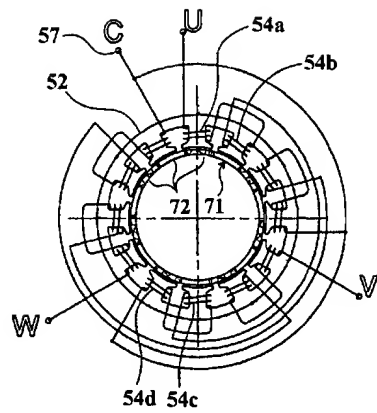


FIG. 18
(Prior Art)

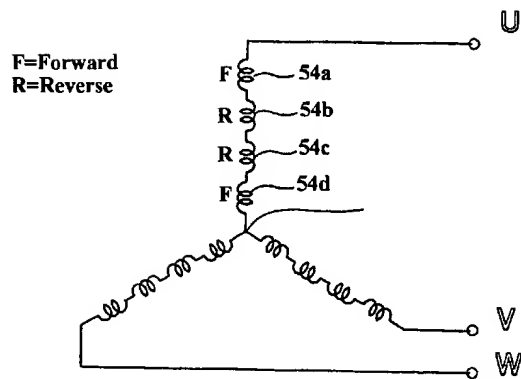


FIG. 19
(Prior Art)

Number m of slots

Number n of poles

	3	6	9	12	15	18
2	6 0.866	6 0.5	18 0.328	12 0.250	30 0.199	18 0.167
4	12 0.866	12 0.866	36 0.617	12 0.433	60 0.389	36 0.328
6	6 0	6 1.0	18 0.866	12 —	30 0.380	18 0.433
8	24 0.866	24 0.866	72 0.946	24 0.866	120 0.711	72 0.616
10	30 0.866	30 0.5	90 0.946	60 0.933	30 0.866	90 0.753
12	12 0	12 0	36 0.866	12 —	60 0.910	36 0.866
14	42 0.866	42 0.5	126 0.617	84 0.633	210 —	126 0.902
16	48 0.866	48 0.866	144 0.328	48 0.866	240 0.952	144 0.946
18	18 0	18 1.0	81 0	36 —	90 0.910	18 —
20	60 0.866	60 0.866	180 0.328	60 0.433	60 0.866	180 0.946
22	66 0.866	66 0.5	198 0.9024	132 0.711	330 0.617	198 0.902
24	24 0	24 0	72 0.866	24 0	120 0.381	72 0.866

Line x

Line y

Region Z

Upper Row: cogging torque frequency Lower row: winding coefficient

Line x: $m=(3/4) \times n$

short-pitch winding coefficient 0.866
distributed winding coefficient

Line y: $m=(3/2) \times n$

short-pitch winding coefficient 0.866
distributed winding coefficient

Region Z: $(2/3)m < n < (4/3)m$

FIG. 20